Remarks

Claims 1, 3-5, and 8-35 are pending in the application. Claim 1 has been amended. Support for the claim amendments can be found throughout the application, including the Exemplification. Importantly, no new matter has been added to the claims.

Further, the amendments to the claims should in no way be construed to be an acquiescence to any of the rejections. The amendments to the claim are being made solely to expedite the prosecution of the above-identified application. Applicant expressly reserves the option to further prosecute the same or similar claims in the instant application or subsequent patent applications entitled to the priority date of the instant application. 35 USC § 120.

Claim Rejections Based on 35 USC § 112¶1

The Examiner's response to the Applicants' previous communication states that the Applicants' arguments "are found not to be persuasive." Specifically, the Examiner contends that "the existence of named catalysts does not support the broad phrase 'and at least one non-chelating ligand." In order to expedite prosecution, the Applicants have amended claim 1, narrowing the ligand component of the transition-metal-catalyst limitation only to read on a catalyst that contains from one to four non-chelating ligands inclusive. The Applicants respectfully assert that ample support for this amendment is found in the Specification. For example, transition metal catalysts containing from one to four non-chelating ligands inclusive are listed on page 34 of the Specification: PdCl₂, Pd(OAc)₂, (CH₃CH)₂PdCl₂, and Pd[P(C₆H₅)₃]₄. Accordingly, the Applicants respectfully request withdraw of the rejected based on 35 U.S.C. § 112¶1.

Claim Rejections Based on 35 USC § 102(e) or 103(a)

Claims 1, 3-5, and 8-35 stand rejected under 35 U.S.C. § 102(a) or 103(a), based on the Examiner's contention that they are anticipated by, or obvious in light of, Hartwig et al., United States Patent 6,057,456 ("the '456 patent"). The Applicants respectfully contend that the amended claims are not anticipated by or obvious in light of the '456 patent because the teachings of the '456 patent are limited to methods using "at least one chelating ligand selected from the group consisting of unsaturated Group 15 heterocycles, Group 15-substituted

metallocenes, Group 15-substituted alkanes, and Group 15-substituted arylenes." In other words, the Applicants respectfully assert that teachings as to methods using only "chelating ligands" do not anticipate or render obvious methods which use only "from one to four non-chelating ligands inclusive."

Accordingly, withdrawal of the rejections under 35 U.S.C. § 102(e) or 103(a) is respectfully requested.

<u>Fees</u>

The Applicants believe no fee is due in connection with the filing of this paper.

Nevertheless, the Director is hereby authorized to charge any required fee to our Deposit Account, 06-1448.

Conclusion

In view of the above amendments and remarks, it is believed that the pending claims are in condition for allowance. If a telephone conversation with Applicants' Attorney would expedite prosecution of the above-identified application, the Examiner is urged to contact the undersigned at (617) 832-1000.

Respectfully submitted,

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Date:

Dana M. Gordon, Ph.D. Registration No.: 44,719 Attorney for Applicants Marked-up Version of Amended Claims Showing Changes Made

1. (twice amended) A method represented by Scheme 1:

$$(R)_p$$
 $(G)_q$
 $+$
 ArX
 $(R)_p$
 $(R)_p$
 $(R)_p$
 $(R)_p$
 $(R)_q$
 $(R)_p$
 $(R)_q$
 $(R$

Scheme 1

wherein

G represents, independently for each occurrence, an electron withdrawing group selected from the group consisting of formyl, acyl, -C(O)OR, $-C(O)NR_2$, nitro, nitroso, $-S(O)_2R$, $-SO_3R$, $-S(O)_2NR_2$, -C(NR)-R, -C(NOR)-R, and $-C(NNR_2)-R$;

R represents, independently for each occurrence, hydrogen, alkyl, aryl, heteroalkyl, heteroaryl, halogen, alkylamino, arylamino, alkylthio, arylthio, alkoxy, aryloxy, or - $(CH_2)_m$ -R₈;

Ar represents an aromatic or heteroaromatic moiety;

 $X \ represents \ halogen, \ -OTf, \ -ONf, \ -OTs, \ -OMs, \ (alkyl)S(O)_2O-, \ or \ (aryl)S(O)_2O-;$

the transition metal catalyst consists essentially of a Group VIIIA metal[;] and [at least] one to four inclusive non-chelating [ligand] ligands selected from the group consisting of OAc, Cl, CH₃CN, triphenylphosphine, tri(o-tolyl)phosphine, trimethylphosphine, triethylphosphine, tripropylphosphine, triisopropylphosphine, tributylphosphine, tricyclohexylphosphine, trimethyl phosphite, triethyl phosphite, tripropyl phosphite, triisopropyl phosphite, tributyl phosphite and tricyclohexyl phosphite;

base represents a Bronsted base;

Rg represents independently for each occurrence a substituted or unsubstituted aryl, cycloalkyl, cycloalkenyl, heterocycle or polycycle;

m, independently for each occurrence, is an integer selected from the range 0 to 8 inclusive;

q is an integer selected from the range 1 to 3 inclusive; and p is an integer equal to (3-q).